WHAT IS CLAIMED IS:

1. A device for wavefront measurement of an optical imaging system by means of a phase-shifting interferometry technique, comprising:

a mask structure (6) to be arranged on the object side, and

a grating structure (7) to be arranged on the image side,

wherein

the mask structure (6) to be arranged on the object side comprises one or more one-dimensional mask structure patterns (6a to 6e), and the grating structure to be arranged on the image side comprises one or more two-dimensional grating structure patterns (7a, 7b), or the mask structure comprises one or more two-dimensional mask structure patterns, and the grating structure comprises one or more one-dimensional grating structure patterns.

2. A method for wavefront measurement of an optical imaging system by means of a phase-shifting interferometry technique, comprising:

at least one of moving a phase-shifting structure (7) and a detector element (2) laterally relative to the optical imaging system (1) to be measured and moving an object-side mask structure (6) laterally relative to the detector element (2),

wherein

a pupil image offset occurring owing to the relative lateral movement is taken into account by back calculating the interferogram, respectively recorded by the detector element, in a way correcting the pupil position, using a phase-shifting

characteristic associated with the lateral movement or by a computational correction of wavefront derivatives, obtained from the recorded interferograms, in the direction of lateral movement.

3. The method according to Claim 2, wherein the computational correction of wavefront derivatives in the direction of lateral movement is performed using the relationship:

$$I^{(2)}(n) = \cos(S_x^{(1)} - \frac{\partial S_x^{(1)}}{\partial x}\frac{\Delta x(n-1)}{N} + \frac{2\pi(n-1)}{N}) \quad ,$$

which specifies the intensity values $I^{(2)}$ of individual detector element pixels as a function of the nth lateral phase shift with $S_x^{(1)}$ as errored wavefront derivative in the phase-shifting direction, from which an error-corrected wavefront derivative ($S_x^{(2)}$) is then calculated.

4. The method according to Claim 2, carried out with aid of a device according to Claim 1.

5. The method according to Claim 3, carried out with aid of a device according to Claim 1.